

U.S.S.N. 09/744,705
Response to 12/15/05 Office Action
February 20, 2006

1998M035A

AMENDMENTS TO THE CLAIMS:

LISTING OF CLAIMS:

1. (Original) A colloidal suspension of a LEV structure type crystalline molecular sieve.
2. (Original) A suspension as claimed in claim 1, wherein the mean size of the LEV particles is within the range of from 5 to 1000 nm.
3. (Original) A suspension as claimed in claim 2, wherein the range is from 10 to 300 nm.
4. (Original) A suspension as claimed in claim 3, wherein the range is from 20 to 100 nm.
5. (Original) A suspension as claimed in claim 1, wherein the mean size of the LEV particles is at most 100 nm.
6. (Currently Amended) A method for preparing a colloidal suspension of a LEV structure type crystalline molecular sieve, which comprises synthesizing a LEV structure type crystalline molecular sieve by treatment of a synthesis mixture containing the elements necessary to form a LEV crystalline molecular sieve, separating the resulting LEV crystalline molecular sieve product from the synthesis mixture, washing the product, and recovering the resulting wash liquid comprising the colloidal suspension of a LEV structure type crystalline molecular sieve.
7. (Original) A method as claimed in claim 6, wherein the recovered wash liquid is the liquid resulting from the second or subsequent washing.
8. (Original) The product of the method of claim 6.
9. (Currently Amended) A process for the manufacture of a crystalline molecular sieve, which process comprises treating a synthesis mixture

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comprising elements necessary to form the molecular sieve and colloidal LEV crystalline molecular sieve seeds for a time and at a temperature appropriate to form the ~~desired~~ molecular sieve.

10. (Currently Amended) A process as claimed in claim 9, wherein the ~~desired~~ molecular sieve is of the LEV structure type.
11. (Currently Amended) A process as claimed in claim 10, wherein the ~~desired~~ molecular sieve is selected from the group consisting of Levyne, ZK-20, NU-3 and ZSM-45.
12. (Original) A process for the manufacture of a crystalline molecular sieve, which comprises treating a synthesis mixture comprising elements necessary to form a molecular sieve of a first structure type, other than LEV, and colloidal LEV molecular sieve seed crystals for a time sufficient and at a temperature appropriate to form the molecular sieve of the first structure type.
13. (Original) The invention as claimed in claim 12, in which colloidal LEV structure type seeds are used in the manufacture of a crystalline molecular sieve selected from the group consisting of the MFS, CHA, OFF, MOR, FER, MAZ, EUO and ERI/OFF, structure types.
14. (Original) A process as claimed in claim 13, wherein the crystalline molecular sieve manufactured is selected from the group consisting of chabasite, a phosphorus-containing molecular sieve of the CHA structure type, mordenite, ferrierite, Linde Zeolite T, mazzite, offretite, ZSM-57, ZSM-38, and ZSM-50.
15. (Currently Amended) In the synthesis of a crystalline molecular sieve other than of LEV structure type by thermal treatment of a synthesis mixture suitable for the manufacture of that molecular sieve, the improvement which comprises the use of step of adjusting the amount of

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colloidal LEV seed crystals to control the morphology of the product,
wherein said amount has a range for 0.001 ppm to 10000 ppm.

16. (Currently Amended) The synthesis as claimed in claim 15, wherein colloidal LEV seeds are used to form Linde Zeolite T of disk-like morphology.
17. (Currently Amended) In the synthesis of a crystalline molecular sieve, the improvement which comprises the use of colloidal LEV seed crystals to control a characteristic of the resulting crystalline molecular sieve.
18. (Currently Amended) The synthesis as claimed in claim 17, wherein the characteristic is at least one member selected from the purity, the particle size, and the particle size distribution.
19. (Original) In the synthesis of a crystalline molecular sieve in the substantial absence of an organic structure-directing agent, the improvement which comprises the use of colloidal LEV seed crystals.
20. (Original) In the synthesis of a crystalline molecular sieve, the improvement comprising the use of colloidal LEV seed crystals to accelerate the formation of the product.
21. (Currently Amended) A process for hydrocarbon conversion, separation, or adsorption, said process comprising the step of contacting a hydrocarbon feedstock with ~~which is carried out in the presence of~~ a crystalline molecular sieve obtained by the treatment of a synthesis mixture comprising colloidal LEV seed crystals and elements necessary to form the molecular sieve for a time and at a temperature appropriate for the formation of the said crystalline molecular sieve under conditions sufficient to convert, separate, or adsorb said hydrocarbon feedstock.
22. (Currently Amended) A process of oxygenate conversion, said process comprising the step of contacting an oxygenate with ~~which is carried out in the presence of~~ a crystalline molecular sieve obtained by the treatment of a

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synthesis mixture comprising colloidal LEV seed crystals and elements necessary to form the molecular sieve for a time and at a temperature appropriate for the formation of the said crystalline molecular sieve under conditions sufficient to convert said oxygenate.